STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0081809; AI 43545; PER20050001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. **THE APPLICANT IS:** Total Environmental Solutions, Inc.
Plantation Trace
1824 Ryder Drive
Baton Rouge, LA 70808

II. **PREPARED BY:** Todd Franklin

DATE PREPARED: January 18, 2006

III. **PERMIT ACTION:** reissue LPDES permit LA0081809, AI 43545; PER20050001

LPDES application received: September 15, 2005

EPA has not retained enforcement authority.

Previous LPDES permit issued: June 1, 2001
Previous LPDES permit expires: May 31, 2006

IV. **FACILITY INFORMATION:**

A. The application is for the discharge of treated sanitary wastewater from a privately owned treatment facility serving the Plantation Trace and Leighton Subdivisions.

B. The permit application does not indicate the receipt of industrial wastewater.

C. The facility is located on Leighton Street in Thibodaux, Lafourche Parish.

D. The treatment facility consists of a facultative lagoon. Disinfection is by chlorination.

E. Outfall 001

Discharge Location: Latitude 29° 47' 41" North
Longitude 90° 51' 22" West

Description: treated sanitary wastewater

Design Capacity: 0.12 MGD

Type of Flow Measurement which the facility is currently using:

Continuous Recorder

V. RECEIVING WATERS:

The discharge is into an unnamed ditch; thence into the Terrebonne/Lafourche Drainage Canal in Subsegment 120202 of the Terrebonne Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 120202 of the Terrebonne Basin are as indicated in the table below[1/]:

Overall Degree of Support for Segment	*Degree of Support of Each Use*						
Partial	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Full	Full	Not Supported	N/A	Full	N/A	N/A

[1/]The designated uses and degree of support for Segment 120202 of the Terrebonne Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 120202 of the Terrebonne Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 21, 2005, from Watson (FWS) to Gautreaux (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, *no further informal (Section 7, Endangered Species Act) consultation is required. It was* determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Todd Franklin
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 120202, Bayou Black-Intracoastal Waterway to Houma, is not listed on LDEQ's Final 2004 303(d) List as impaired, and to date no TMDL's have been established. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.

Final Effluent Limits:

OUTFALL 001

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD_5	10	10 mg/l	15 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size.
TSS	15	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.

Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.).

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0081809: Issued: June 1, 2001
Expired: May 31, 2006

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type
Flow	Report	Report	Continuous	Recorder
BOD_5	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Fecal Coliform Colonies/100 ml	200	400	2/month	Grab
pH	Range (6.0 su – 9.0 su)		2/month	Grab

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates that no recent inspections were performed for this facility.

B) Compliance and/or Administrative Orders

A review of the files indicates that no recent enforcement actions have been administered against this facility.

C) DMR Review

A review of the discharge monitoring reports for the period beginning April 1, 2003, through March 31, 2005, has revealed the following violations:

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
pH	001	April 2003	Range (6.0 su – 9.0 su)	9.6 su
TSS, Monthly Avg.	001	April 2003	16 lb/day	55.81 lb/day
TSS, Monthly Avg.	001	April 2003	15 mg/l	107.00 mg/l
TSS, Weekly Avg.	001	April 2003	23 mg/l	114.00 mg/l
Fecal Coliform, Weekly Avg.	001	April 2003	400 cfu/100 ml	5,800.0 cfu/100 ml
BOD_5, Monthly Avg.	001	April 2003	11 lb/day	13.645 lb/day
BOD_5, Monthly Avg.	001	April 2003	10 mg/l	27.5 mg/l
BOD_5, Weekly Avg.	001	April 2003	15 mg/l	34.0 mg/l
pH	001	May 2003	Range (6.0 su – 9.0 su)	9.3 su
TSS, Monthly Avg.	001	May 2003	16 lb/day	27.57 lb/day
TSS, Monthly Avg.	001	May 2003	15 mg/l	122.00 mg/l
TSS, Weekly Avg.	001	May 2003	23 mg/l	122.00 mg/l
Fecal Coliform, Monthly Avg.	001	May 2003	200 cfu/100 ml	TNTC
Fecal Coliform, Weekly Avg.	001	May 2003	400 cfu/100 ml	TNTC
BOD_5, Monthly Avg.	001	May 2003	10 mg/l	28.0 mg/l
BOD_5, Weekly Avg.	001	May 2003	15 mg/l	28.0 mg/l
pH	001	June 2003	Range (6.0 su – 9.0 su)	9.6 su
TSS, Monthly Avg.	001	June 2003	16 lb/day	74.00 lb/day
TSS, Monthly Avg.	001	June 2003	15 mg/l	71.00 mg/l
TSS, Weekly Avg.	001	June 2003	23 mg/l	120.00 mg/l
BOD_5, Monthly Avg.	001	June 2003	11 lb/day	19.770 lb/day
BOD_5, Monthly Avg.	001	June 2003	10 mg/l	20.5 mg/l
BOD_5, Weekly Avg.	001	June 2003	15 mg/l	28.0 mg/l
pH	001	July 2003	Range (6.0 su – 9.0 su)	9.8 su
TSS, Monthly Avg.	001	July 2003	16 lb/day	63.81 lb/day
TSS, Monthly Avg.	001	July 2003	15 mg/l	59.00 mg/l
TSS, Weekly Avg.	001	July 2003	23 mg/l	60.00 mg/l
Fecal Coliform, Weekly Avg.	001	July 2003	400 cfu/100 ml	900.0 cfu/100 ml
BOD_5, Monthly Avg.	001	July 2003	11 lb/day	15.618 lb/day
BOD_5, Monthly Avg.	001	July 2003	10 mg/l	14.5 mg/l
BOD_5, Weekly Avg.	001	July 2003	15 mg/l	16.0 mg/l
pH	001	August 2003	Range (6.0 su – 9.0 su)	9.4 su
TSS, Monthly Avg.	001	August 2003	16 lb/day	94.92 lb/day
TSS, Monthly Avg.	001	August 2003	15 mg/l	85.00 mg/l
TSS, Weekly Avg.	001	August 2003	23 mg/l	64.00 mg/l
BOD_5, Monthly Avg.	001	August 2003	11 lb/day	37.410 lb/day
BOD_5, Monthly Avg.	001	August 2003	10 mg/l	33.5 mg/l
BOD_5, Weekly Avg.	001	August 2003	15 mg/l	23.0 mg/l
pH	001	September 2003	Range (6.0 su – 9.0 su)	9.8 su
TSS, Monthly Avg.	001	September 2003	16 lb/day	122.43 lb/day
TSS, Monthly Avg.	001	September 2003	15 mg/l	157.00 mg/l
TSS, Weekly Avg.	001	September 2003	23 mg/l	170.00 mg/l
BOD_5, Monthly Avg.	001	September 2003	11 lb/day	29.638 lb/day
BOD_5, Monthly Avg.	001	September 2003	10 mg/l	36.5 mg/l
BOD_5, Weekly Avg.	001	September 2003	15 mg/l	41.0 mg/l
pH	001	October 2003	Range (6.0 su – 9.0 su)	9.4 su
TSS, Monthly Avg.	001	October 2003	16 lb/day	62.79 lb/day
TSS, Monthly Avg.	001	October 2003	15 mg/l	80.00 mg/l
TSS, Weekly Avg.	001	October 2003	23 mg/l	84.00 mg/l
BOD_5, Monthly Avg.	001	October 2003	11 lb/day	19.343 lb/day

BOD_5, Monthly Avg.	001	October 2003	10 mg/l	24.5 mg/l
BOD_5, Weekly Avg.	001	October 2003	15 mg/l	25.0 mg/l
pH	001	November 2003	Range (6.0 su – 9.0 su)	9.5 su
TSS, Monthly Avg.	001	November 2003	16 lb/day	59.56 lb/day
TSS, Monthly Avg.	001	November 2003	15 mg/l	145.50 mg/l
TSS, Weekly Avg.	001	November 2003	23 mg/l	129.00 mg/l
BOD_5, Monthly Avg.	001	November 2003	11 lb/day	16.343 lb/day
BOD_5, Monthly Avg.	001	November 2003	10 mg/l	38.5 mg/l
BOD_5, Weekly Avg.	001	November 2003	15 mg/l	37.0 mg/l
pH	001	December 2003	Range (6.0 su – 9.0 su)	9.5 su
TSS, Monthly Avg.	001	December 2003	16 lb/day	80.75 lb/day
TSS, Monthly Avg.	001	December 2003	15 mg/l	92.00 mg/l
TSS, Weekly Avg.	001	December 2003	23 mg/l	94.00 mg/l
BOD_5, Monthly Avg.	001	December 2003	11 lb/day	22.107 lb/day
BOD_5, Monthly Avg.	001	December 2003	10 mg/l	26.5 mg/l
BOD_5, Weekly Avg.	001	December 2003	15 mg/l	32.0 mg/l
TSS, Monthly Avg.	001	January 2004	16 lb/day	51.46 lb/day
TSS, Monthly Avg.	001	January 2004	15 mg/l	74.00 mg/l
TSS, Weekly Avg.	001	January 2004	23 mg/l	198.00 mg/l
BOD_5, Monthly Avg.	001	January 2004	10 mg/l	18.0 mg/l
BOD_5, Weekly Avg.	001	January 2004	15 mg/l	25.7 mg/l
TSS, Monthly Avg.	001	February 2004	16 lb/day	29.77 lb/day
TSS, Monthly Avg.	001	February 2004	15 mg/l	91.00 mg/l
TSS, Weekly Avg.	001	February 2004	23 mg/l	108.00 mg/l
BOD_5, Monthly Avg.	001	February 2004	10 mg/l	26.7 mg/l
BOD_5, Weekly Avg.	001	February 2004	15 mg/l	29.4 mg/l
pH	001	March 2004	Range (6.0 su – 9.0 su)	9.9 su
TSS, Monthly Avg.	001	March 2004	16 lb/day	21.27 lb/day
TSS, Monthly Avg.	001	March 2004	15 mg/l	99.00 mg/l
TSS, Weekly Avg.	001	March 2004	23 mg/l	128.00 mg/l
BOD_5, Monthly Avg.	001	March 2004	10 mg/l	27.0 mg/l
BOD_5, Weekly Avg.	001	March 2004	15 mg/l	29.0 mg/l
pH	001	April 2004	Range (6.0 su – 9.0 su)	9.7 su
TSS, Monthly Avg.	001	April 2004	16 lb/day	19.92 lb/day
TSS, Monthly Avg.	001	April 2004	15 mg/l	83.00 mg/l
TSS, Weekly Avg.	001	April 2004	23 mg/l	84.00 mg/l
BOD_5, Monthly Avg.	001	April 2004	10 mg/l	24.0 mg/l
BOD_5, Weekly Avg.	001	April 2004	15 mg/l	26.0 mg/l
TSS, Monthly Avg.	001	May 2004	16 lb/day	94.31 lb/day
TSS, Monthly Avg.	001	May 2004	15 mg/l	97.00 mg/l
TSS, Weekly Avg.	001	May 2004	23 mg/l	100.00 mg/l
Fecal Coliform, Monthly Avg.	001	May 2004	200 cfu/100 ml	TNTC
Fecal Coliform, Weekly Avg.	001	May 2004	400 cfu/100 ml	TNTC
BOD_5, Monthly Avg.	001	May 2004	11 lb/day	22.115 lb/day
BOD_5, Monthly Avg.	001	May 2004	10 mg/l	21.5 mg/l
BOD_5, Weekly Avg.	001	May 2004	15 mg/l	27.0 mg/l
TSS, Monthly Avg.	001	June 2004	16 lb/day	21.45 lb/day
TSS, Monthly Avg.	001	June 2004	15 mg/l	25.75 mg/l
TSS, Weekly Avg.	001	June 2004	23 mg/l	29.00 mg/l
BOD_5, Monthly Avg.	001	August 2004	11 lb/day	19.642 lb/day
BOD_5, Monthly Avg.	001	August 2004	10 mg/l	56.5 mg/l
BOD_5, Weekly Avg.	001	August 2004	15 mg/l	108.0 mg/l

BOD_5, Monthly Avg.	001	October 2004	10 mg/l	11.0 mg/l
BOD_5, Weekly Avg.	001	October 2004	15 mg/l	16.0 mg/l
TSS, Monthly Avg.	001	December 2004	16 lb/day	20.63 lb/day
BOD_5, Monthly Avg.	001	December 2004	11 lb/day	14.854 lb/day
TSS, Monthly Avg.	001	January 2005	16 lb/day	22.57 lb/day
TSS, Monthly Avg.	001	January 2005	15 mg/l	28.50 mg/l
TSS, Weekly Avg.	001	January 2005	23 mg/l	42.00 mg/l
TSS, Monthly Avg.	001	February 2005	16 lb/day	49.25 lb/day
TSS, Monthly Avg.	001	February 2005	15 mg/l	52.00 mg/l
TSS, Weekly Avg.	001	February 2005	23 mg/l	62.00 mg/l
BOD_5, Monthly Avg.	001	February 2005	11 lb/day	14.611 lb/day
BOD_5, Monthly Avg.	001	February 2005	10 mg/l	15.5 mg/l
BOD_5, Weekly Avg.	001	February 2005	15 mg/l	17.0 mg/l
TSS, Monthly Avg.	001	March 2005	16 lb/day	20.52 lb/day
TSS, Monthly Avg.	001	March 2005	15 mg/l	26.00 mg/l
TSS, Weekly Avg.	001	March 2005	23 mg/l	38.00 mg/l

XII. ADDITIONAL INFORMATION:

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon water quality studies. These studies may indicate the need for more advanced wastewater treatment. Studies of similar dischargers and receiving water bodies have resulted in monthly average effluent limitations of 5 mg/l $CBOD_5$, and 2 mg/l NH_3-N. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.12 MGD.

Effluent loadings are calculated using the following example:

BOD: 8.34 lb/gal x 0.12 MGD x 10 mg/l = 10 lb/day

At present, the Monitoring Requirements, Sample Types, and Frequency of Sampling as shown in the permit are standard for facilities of flows between 0.10 and 0.50 MGD.

Effluent Characteristics	Monitoring Requirements	
	Measurement Frequency	Sample Type
Flow	Continuous	Recorder
BOD_5	2/month	Grab
Total Suspended Solids	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Total Environmental Solutions, Inc., Plantation Trace, September 15, 2005.